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10/25/04

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1.- 4. (cancelled)

b/ 5. (currently amended) A method of reducing a flow-induced disturbance on an actuator arm of a disc drive, comprising steps of:

- (a) ~~receiving~~ redirecting a portion of a tangential gas flow generated by a rotation of a first disc of the disc drive; and
- (b) ~~guiding the received flow~~ along a surface mechanically isolated from the actuator arm ~~so as to cause the received flow to include a substantial inward radial component so as to be more closely aligned along a leading edge of the actuator arm by directing the received flow through a channel that is stationary with respect to a housing and toward an inner diameter of the disc.~~

6. (currently amended) The method of claim 5 in which the disc has a nominal radius R and in which the ~~surface has a horizontal cross section with a minimum macroscopic~~ surface defines a channel comprising a radius of curvature greater than R/100 so that the direction step (b1) is performed with a minimal drag-induced energy loss.

7. (currently amended) The method of claim 5 6 in which the disc drive further includes a second disc configured for co-rotation with the first disc, and in which the channel ~~has a vertically uniform cross section~~ spans both discs so that the ~~radial component of the guided~~ redirected gas flow will be larger enters a space between the discs than above the discs.

8. (currently amended) The method of claim 5 ~~in which the guiding step (b)~~ includes a step (b1) of expelling at least part of the guided flow wherein the redirected

portion of the gas flow combines with the rest of the tangential gas flow upstream of the actuator arm toward an inner diameter of the disc.

9. (currently amended) The method of claim 8 ~~in which the guiding step (b) further includes steps of:~~

(b2) ~~combining the expelled flow with a tangent flow traveling along an edge of the disc so that the combined flow has a net flow direction with an inward radial component;~~

(b3) ~~redirecting the combined flow again comprising a second redirecting of the combined flows with the leading edge of the actuator arm before the combined flow travels flows travel $\frac{1}{4}$ of a revolution of the disc so that the flow induced disturbance on the actuator arm is reduced by the inward radial component of the net flow direction.~~

10. (currently amended) The method of claim 5 ~~in which the flow of the receiving step (a) has a flow speed and in which the guiding step (b) includes a step (b1) of maintaining the flow speed within 50% while the received flow remains within the channel wherein the redirected portion of the gas flow comprises a velocity that is at least 50% of the tangential gas flow velocity.~~

11. (currently amended) The method of claim 5 ~~6~~ in which the disc has a nominal radius R and in which a ~~narrowest cross section along the channel has a~~ forms a lateral width that is greater than $R/100$ ~~so that the channel can accommodate a significant flow.~~

12. – 15. (cancelled)

16. (new) The method of claim 5 wherein the disc drive has a second disc configured for co-rotation with the first disc, and wherein the surface does not extend into a space between the first and second discs.

17. (new) The method of claim 5 comprising a second redirecting of the portion of the gas flow with the leading edge of the actuator arm before the redirected portion of the gas flow travels $\frac{1}{4}$ of a revolution of the disc.

18. (new) A turbulence attenuation device for an actuator in a data reading and writing relationship with a rotatable storage media, comprising:

a shroud disposed adjacent to an edge of the disc adapted for defining a tangential fluid flow generated by a rotation of the media;

surfaces defining a channel in fluid communication with the shroud, the channel comprising an inlet adapted for admitting a portion of the tangential fluid flow in a direction away from the disc, and an opposing outlet directing the portion of the tangential fluid flow toward an inner diameter of the disc.

19. (new) The device of claim 18 wherein the storage media defines a radius R , and wherein the surfaces define a radius of curvature of the channel that is greater than $R/100$.

20. (new) The device of claim 18 wherein the storage media comprises two stacked discs, and wherein the channel spans a space between the discs for directing the portion of the tangential fluid flow into the space between the discs.

21. (new) The device of claim 18 wherein the portion of the tangential fluid flow after passing through the outlet combines with the rest of the tangential fluid flow upstream of the actuator.

22. (new) The device of claim 18 wherein the channel is sized to accommodate a fluid flow velocity therein that is at least 50% of the tangential fluid flow.

23. (new) The device of claim 19 wherein wherein the channel forms a lateral width that is greater than $R/100$.

24. (new) A storage device comprising:

an actuator disposed in a data reading and writing relationship with a rotating disc; and

a device for attenuating flow-induced disturbances acting on the actuator by steps for redirecting an airflow upstream of the actuator.

25. (new) The device of claim 24 wherein the steps for redirecting is characterized by receiving a portion of a tangential airflow generated by the rotating disc.

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26. (new) The device of claim 25 wherein the steps for redirecting is characterized by redirecting the portion of the tangential airflow toward an inner diameter of the disc.

27. (new) The device of claim 26 wherein the steps for redirecting is characterized by combining the redirected portion of the tangential airflow with the rest of the tangential airflow.

28. (new) The device of claim 27 wherein the steps for redirecting is characterized by passing the combined airflows across a leading edge of the actuator.
